SOME HITHERTO UNDESCRIBED PLANTS OF NEW SOUTH WALES.

Recorded by Baron von Mueller, K.C.M.G., M.D., Ph.D., F.R.S.

Grevillea Renwickiana, n. sp.

Quite procumbent; branches elongated; branchlets nearly glabrous leaves in outline almost lanceolar, generally pinnatifid, slightly recurved at the margin, glabrous above, subtle appressed-hairy beneath, the base cuneately decurrent on the leafstalk, the lobes from semilanceolar to nearly deltoid and pungent-pointed ; flowers 2-6 together on the conspicuous stalk, much longer than their stalklets ; petals from pale-greenish turning to slate-colour, much recurved in their upper part, outside scantily appressed-hairy, inside glabrous ; hypogynous gland almost semicircular, depressed, not protruding ; style long-exserted, of rosy coloration, except near the base glabrous ; stigma at the summit lateral, roundish-oval ; ovary on a short stipes, white-silky.

On heath-ground near the Little River in the Braidwood District, at an elevation of about 3,000 feet (W. Bäuerlen).

Branches lengthening to four feet. Well-developed leaves 2-4 inches long. General flower-stalks $\frac{1}{2}$-1 inch long, with the stalklets towards the summit, the latter about $\frac{1}{6}$ inch in length, scantily hairy. Bracts minute, semilanceolar-deltoid, early deciduous. Rudimentary calyx truncate, only slightly descending, (hardly less developed than in *Vitis* and some species of *Rhododendron*). Petals through their back-curvature not much above half-an-inch long. Style hardly exceeding an inch in length. Fruit not yet obtained.

In its completely prostrate growth this very local species is similar, among East Australian congeners, to *G. laurifolia* and *G. repens*, differing from both, however, in the larger and much less numerous flowers. The same characteristics remove it from *G. asplenifolia*, which has similar leaves, but is of erect stature.

The majority of the flowers on the transmitted specimens, as well as numerous others sent subsequently at my desire by Mr. Bäuerlen, are bipistillate, two ovaries developing on distinct stipites, each with its own style and stigma, or occasionally two of the pistils still from the same flower are connate into one; rarely even a third pistil is developed. This tendency to floral duplication also extends partly to the petals, which sometimes become augmented in number also, while the often scattered stalklets may appear solitary through the concrescence of two. Analogous teratological states of flowers seem not to have been noted before in the vast order of *Proteaceæ*.

G. Goodii and *G. cirsiifolia* share the same depressed or creeping mode of growth; the former produces racemes sometimes 5 inches long; the latter species has recently been shown by Mr. W. Webb to occur on Mount Lindsay.

This remarkable plant has been dedicated to the Hon. Dr. Renwick, who in his legislative, professional, and social position, has much promoted scientific research in this colony; who, as Executive Commissioner for N.S.W. at the Melbourne International Exhibition, advanced much the industrial and rural interests of the elder of these colonies; who initiated there a systematic department for forest-culture; and who, in his present ministerial position, also gave for technologic purposes some support to the travels of the discoverer of this new *Grevillea*.

Melaleuca Deanei, n. sp.

Branchlets glabrous; leaves scattered, almost lanceolar, thick, nearly flat, three-nerved, glabrous; spikes rather short; calyces imperfectly velvet-downy, their lobes semi-ovate, about half as long as the petals, deciduous; connate portions of the stamens shorter than the calyx-lobes; filaments in each bundle 15-20; anthers pale,

almost oval; stigma slightly dilated; fruits rather large, smooth, nearly hemi-ellipsoid, with broadish base sessile, without denticulations at the orifice; valves deeply enclosed.

On the northern side of the Lane Cove River, occupying sandy ground on the ridges (H. Deane, Esq.).

This plant is closely allied to *M. parviflora*, which species, though frequent along the whole southern and also extratropic western coast-country, does not seem to follow the eastern shores of our continent, unless the present plant should prove an outpost of the large individual masses of the species, and should have become somewhat changed by altered climatic influences. The leaves are larger, straighter and less acute, with a more evident lateral nervature, resembling rather those of *Leptospermum lævigatum*; the spikes so far as seen are shorter, the fruits are considerably larger, and do not retain the calyx-lobes. Mr. Betche seems to have found the identical plant on the Richmond River; but I have not seen any fruiting specimens from there.

While alluding to a new plant of this genus, the following localities of other rare species may now be recorded: *M. hypericifolia*, Broger's Creek, up to 1,800 feet, there attaining a height of 15 feet (Bäuerlen); *M. elliptica* and *M. adnata*, near Mount Rugged (Miss S. Brooke); *M. thymifolia*, Cudgegong (Dr. Barnard), Upper Clarence River (Miss Brendodi); *M. erianthæ*, near Beverley (Miss Smith); *M. foliolosa*, Endeavour River (W. Persieh); Mitchell and Flinders Rivers (Edw. Palmer); height of the last-named species to 20 feet, its bark lamellar.

Bossiaea Stephensonii, n. sp.

Erect, almost totally glabrous; branchlets rather slender, conspicuously compressed; stipules comparatively large, from a roundish-broad base nearly lanceolar, of almost foliaceous texture; leaves elliptic-lanceolar, pointed, slightly rough, hardly paler beneath, gently recurved at the margin; stalklets twice or thrice as long as the small calyx; its bracteoles basal; upper half of the calyx not much shorter than the lower, its lobes almost deltoid; lobes of the lower half semi-lanceolar; fruit somewhat

elliptical, but truncated into an almost quadrangular form, its stalk-like base not much longer than the calyx; seeds generally 5-6.

Near Wollongong (L. Stephenson, B.A.).

Innovations somewhat hairy. Branchlets about $\frac{1}{8}$ inch broad. Leaves alternate, chartaceous in texture, almost distichous, hardly spreading, $\frac{1}{2}$-$\frac{2}{3}$ inch long, equilateral, on short stalks, blunt at the base; veins particularly visible underneath; stipules green, attaining a length of nearly $\frac{1}{4}$ inch. Stalklets very thin, about as long as the leaves. Bracteoles none on the upper part of the stalklet unless very fugacious. Calyx scarcely exceeding $\frac{1}{6}$ inch in length; its lower lobes proportionately large. Petals not seen. Filaments nearly as long as the connate portion of the stamens. Fruit bent downward, scarcely one inch long, and $\frac{1}{3}$ inch broad, almost flat, prominently margined, but not obtained in a fully matured state.

Recognised by the erudite finder as a distinct species; nearest to *B. heterophylla* (as a form of which it may cursorily have been hitherto passed over), but easily distinguished by uniformly broader not incurved leaves, longer and thinner stalklets without any bracteoles towards the middle, smaller calyces, blunter and less stipitated fruit; approaches in some respects the West Australian *B. linophylla*, but the leaves are constantly broader, the stalklets of the flowers longer, the calyces more deeply lobed, while the stipes of the fruit is shorter; moreover from both, and indeed most congeners, Mr. Stephenson's plant is separated by the large but slowly brownishing stipules.

Incidentally it may be here observed that *B. cordigera* has been found by Mr. Wooster, at Bolwarra; *B. foliosa* by Mr. Bäuerlen, on the Genoa; *B. buxifolia* by Dr. Lauterer, on the Turon; *B. microphylla* by Mr. Stirling, on the Dargo; *B. Armitii* by Mr. Armit, on the Etheridge and Percy Rivers; further it may be noted, that on the mountains near Braidwood, *B. Kiamensis* was found to ascend to 3,800 feet (W. Bäuerlen), the height of the plant ranging from $\frac{1}{2}$ to 10 feet; its fruit is much compressed, rhomboid-ovate, and about half an inch long. Meisner already recorded 8-12 ovules as those of *B. eriocarpa.*

PULTENAEA BAEUERLENII, n. sp.

Erect, dwarf; stipules elongated, somewhat downy; leaves crowded, filiform, channelled, slightly pointed, granular-rough outside; flower-heads terminal; bracteoles about as long as the calyx, lanceolar, slightly downy at the margin; calyx partially glabrous, its lobes subulate-semilanceolar; petals all yellow, the upper one somewhat longer than the others; anthers black; style nearly glabrous; ovary silky.

On the summit of Mount Currockbilly, accompanied by *Dracophyllum secundum*, *Blandfordia nobilis*, *Bossiaea Kiamensis*, *Boronia pilosa* and *B. rhomboidea*, at an elevation of 4,000 feet (W. Bäuerlen). Allied to *P. aristata*, but the stipules broader and less pointed, the leaves never distinctly mucronate, the bracteoles not terminating in a distinct bristle, the calyx-lobes much less narrowed upwards and not long-ciliated, the anthers dark, and probably the fruit also will show marks of distinction; from *P. rosea* it differs in not having silky bracteoles and calyces, in more pointed lobes of the latter, in colour of petals, in less hairy style, and again perhaps in fruit.

Pultenaea altissima occurs also on the mountains near Braidwood, up to 3,000 feet (Bäuerlen).

The opportunity is an apt one for recording also those plants, which from Mr. W. Bäuerlen's recent collections, can now additionally be indicated as occurring very far south in New South Wales.

Mollinedia Huegelii; Shoalhaven
Cocculus Moorei; Shoalhaven.
Euodia micrococca; Shoalhaven.
Phyllanthus Ferdinandi; Shoalhaven.
Monotaxis linifolia; Braidwood.
Cryptandra Scortechinii; Braidwood.
Cryptandra ericifolia; Broger's Creek.
Mirbelia pungens: Braidwood.
Pultenæa pycnocephala; Mt. Currockbilly.
Daviesia squarrosa; Clyde.
Daviesia acicularis; Shoalhaven.

Jacksonia scoparia ; Shoalhaven (Th. Weir).
Acacia pubescens ; Shoalhaven.
Albizzia pruinosa ; Shoalhaven.
Abrophyllum ornans ; Shoalhaven.
Olax stricta ; Braidwood.
Panax cephalobotrys ; Broger's Creek.
Villaresia Moorei ; Bulli (Kirton).
Symphyonema paludosum ; Broger's Creek.
Stenocarpus salignus ; Shoalhaven.
Banksia latifolia ; Bulli (Kirton).
Candollea linearis ; Broger's Creek.
Mitrasacme polymorpha ; Broger's Creek.
Ruellia australis ; Shoalhaven.
Styphelia esquamata ; Braidwood.
Epacris crassifolia ; Broger's Creek.
Epacris Calvertiana ; Braidwood.
Woollsia pungens ; Braidwood.
Prasophyllum striatum ; Broger's Creek.
Lyperanthus ellipticus ; Broger's Creek.
Colocasia macrorrhiza ; Ulladulla (35° 18′ S.)
Schoenus ericetorum ; Braidwood.
Psilotum triquetrum ; Broger's Creek.